

IN THE CLAIMS

Please cancel claim 2

Please amend the following claims.

1. (Previously amended) A method for forming hardened interconnects comprising:

depositing a metal layer comprising copper and an additional metal species over a semiconductor wafer surface wherein said copper and said additional metal species are co-deposited; and

~~introducing additional metal species into said metal layer~~

after co-depositing said metal layer comprising said copper and said additional species performing chemical-mechanical polishing of said deposited metal layer comprising copper and an additional metal species wherein said additional metal species hardens said deposited metal layer to reduce the rate of said polishing.

2. Cancelled

3. (Original) The method of claim 2, wherein said additional metal species is beryllium.

4. (Original) The method of claim 3, wherein the beryllium forms a solid solution in said deposited copper layer.

5. (Previously amended) A method for forming hardened interconnects comprising:

depositing metal layers over a semiconductor wafer surface;
introducing additional metal species;
heating the deposited metal film with the introduced metal species;
allowing the heated metal film to cool, so as to form precipitates of said introduced metal species; and

after allowing said heated metal film to cool performing chemical-mechanical polishing wherein said additional metal precipitate hardens said deposited metal layer to reduce the rate of said polishing.

6. (Original) The method of claim 5, wherein the deposited metal layer is copper.

7. (Original) The method of claim 5, wherein the additional metal species is beryllium.

18. (Amended) A method of forming interconnects of an integrated circuit comprising:

forming an opening in an insulating film formed over a substrate;
depositing co-depositing a metal film and an additional metal species over
said insulating layer and in said opening and filling said opening with said metal film
and said additional metal species; and

~~introducing an additional metal species into said metal film in said opening~~
~~and into said metal film over said insulating layer; and~~

after ~~introducing~~ co-depositing said metal film and said additional metal species into said opening, chemical mechanical polishing said deposited metal film with said additional metal species to remove said metal film from over said insulating layer.

19. (Previously added) The method of claim 18 wherein said metal film comprises copper.

20. (Previously added) The method of claim 19 wherein said additional metal species is beryllium.

21. (Previously added) The method of claim 18 further comprising heating said deposited metal film with said introduced metal species prior to performing said chemical mechanical polishing.